

GP-301022

## AUTOMATIC RECONFIGURATION OF SYSTEM SUB-MODELS FOR INDEPENDENT ANALYSIS

### ABSTRACT OF THE DISCLOSURE

A process for analyzing a sub-model associated with a full system model as often depicted as an influence diagram. The process includes defining the sub-model as a collection of entities where some entities are calculation entities and some are data entities. The process converts the calculation entities in the sub-model that depend on entities in the full model outside of the sub-model to temporary data entities. Further, the process deletes any data entity in the sub-model from which any converted temporary data entity depends. The process also determines if there are any isolated cycles in the sub-model, and, if so, which of the entities in the isolated cycle will be an output entity.